

Work Order ID 137835

October 08, 2015 2:52:19 PM

D 4842-041
B 137835
REV. B

137835

Page 1

Item ID: D4842-041

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Lower Cutter Assembly

Start Date: 10/8/2015 Start Qty: 3.00

Required Date: 10/30/2015 Req'd Qty: 3.00

Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan: SU

Date: 20151008

Tooling:

Date:

Run Start

NR1

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D4842

REV B

110

Pick Kit

0.00

NOV 12 2015

DAS
6
9-89

110

Packaging

Memo

0.00

Packaging

120

0.00

120

Small Fab

Memo

0.00

Small Fab

Assemble as per dwg and apply loctite 598 on all faying surfaces.

A/R LOCTITE 598 M134260

3X

16/03/16

DAS
36
9-89

130

QC5- Inspect part completeness to step on W/O

0.00

130

QC

Memo

0.00

Quality Control

3

DAS
38
9-89
MAR 21 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					

Root Cause				FAULT CATEGORY			
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐
Past Expiry Date	☐	Manufacturing Process	☐	OTHER : _____			
Misidentified	☐	Past Due	☐				

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Page 2

Accept

Setup Start *NS1*

Stop *NS2*

Start Date: 10/8/2015 **Start Qty:** 3.00 ***3***

Cust Item ID:

Required Date: 10/30/2015 **Req'd Qty:** 3.00 ***2***

Customer:

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

Operation Description

Set Up/ Run Hours

Tool ID**Tool #****Plan
Code**

**Accept
Qty**

Reject
QtyReject
Number

**Insp.
Stamp**

140

Identify as per dwg & Stock Location: *St.*

0.00

140

Packaging

Memo

0.00

3

MAR 22 2016

DAE
6
3-89

Packaging

150

QC21- Final Inspection - Work Order Release

0.00

150

QC

Memo

0.00

Quality Control

Ans

MAR 22 2016

MC

MAR 22 2016

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
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Root Cause				FAULT CATEGORY			
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐
Past Expiry Date	☐	Manufacturing Process	☐	OTHER :			
Misidentified	☐	Past Due	☐				

Picklist Print

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Page 1

Work Order ID: 137835

137835

Parent Item: D4842-041

D4842-041

Parent Item Name: Lower Cutter Assembly

Start Date: 10/8/2015

Required Date: 10/30/2015

Start Qty: 3.00

Required Qty: 3.00

Comments: IPP REV:A 13.04.30 NEW ISSUE DD VERF:JLM IPP
REV:B 13.11.01 AS PER DWG REV.B DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D4839-1 *D4839-1* Blade		Manufactured	No				Each	28.0000	**	6			DAS 6 9-89
				<u>Location</u>				<u>Loc Qty</u>					
				CCK128				28					
				134649				7					
				137690				21					
D4842-1 *D4842-1* Lower Cutter Deflector		Manufactured	No				Each	5.0000	**	3 137374			DAS 6 9-89
				<u>Location</u>				<u>Loc Qty</u>					
				CCK128				5					
				100670				1					
				107947				3					
				109250				1					
D4842-3 *D4842-3* Lower Cutter Body, LH		Manufactured	No				Each	2.0000	**	3 137373			DAS 6 9-89
				<u>Location</u>				<u>Loc Qty</u>					
				MF				2					
				107957				2					

NOV 12 2015

Picklist Print

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Page 2

Work Order ID: 137835

137835

Parent Item: D4842-041

D4842-041

Parent Item Name: Lower Cutter Assembly

Start Date: 10/8/2015

Required Date: 10/30/2015

Start Qty: 3.00

Required Qty: 3.00

D4842-4 Manufactured No

Each 7.0000

D4842-4

Lower Cutter Body, RH

3
137322x1
B 142 317 (2)
DAS 6 9-89

Location

Loc Qty

Loc Code

CCK128

7

108070

1

109252

6

MS21042L08

Purchased No

Each 569.0000

MS21042L 08

Nut

18
133523
DAS 6 9-89

Location

Loc Qty

Loc Code

CA

101

m129682

101

GA

261

m133134

261

ST304

207

123900

16

m128401

102

m128429

3

m131317

26

m132930

60

NOV 12 2015

DAS 26 9-89
1434063 (96)

Picklist Print

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Page 3

Work Order ID: 137835

Parent Item: D4842-041

Parent Item Name: Lower Cutter Assembly

137835

D4842-041

Start Date: 10/8/2015

Required Date: 10/30/2015

Start Qty: 3.00

Required Qty: 3.00

MS27039-08-19

Purchased

No

Each

543.0000

MS27039-08-19

Screw

**

DAS

6

9-89

Location

Loc Qty

Loc Code

cck007a

100

m133077

100

GA

243

m132930

243

ST273A

171

m131317

171

ST281

29

m131264

29

Each

2,370.000

**

NAS1149FN832P

Purchased

No

NAS1149FN832P

Washer

Location

Loc Qty

Loc Code

GA

460

125268

460

ST260a

500

M133316

500

ST267

489

125268

100

M133284

389

st268

921

M130388

921

18 ~~27~~ 18

DAS
36
M134063 (9x) 9-89

36 ~~37~~ 36

NOV 12 2015

DAS

6

9-89

DAS

36

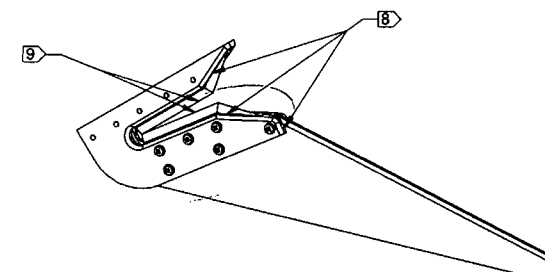
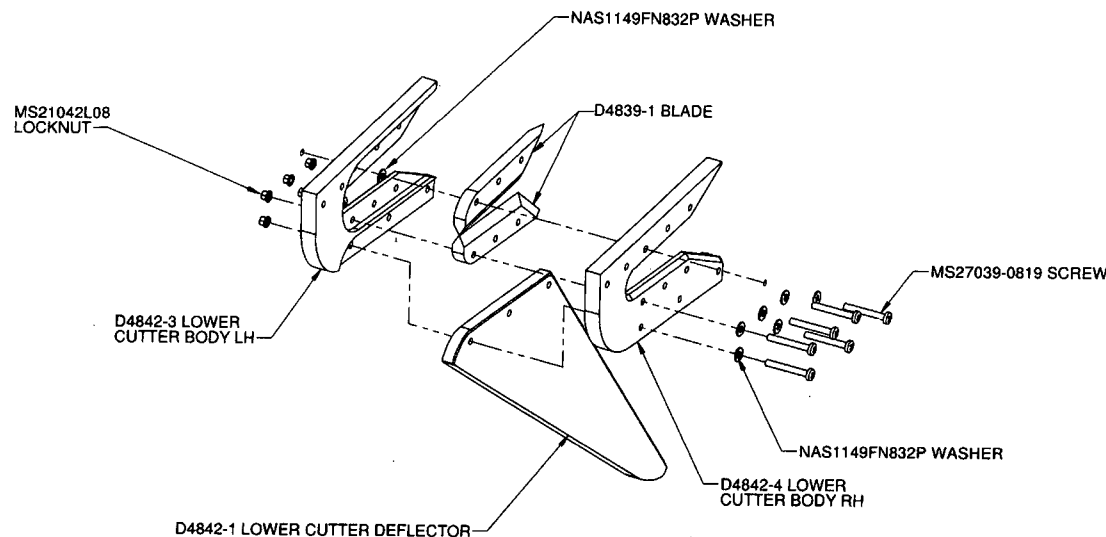
9-89

October 08, 2015 2:38:23 PM

Shop Packet Print

Page 3

ITEM	QTY -041	P/N	DESCRIPTION
	X	D4842-041	LOWER CUTTER ASSY
1	2	D4839-1	BLADE
2	1	D4842-1	LOWER CUTTER DEFLECTOR
3	1	D4842-3	LOWER CUTTER BODY LH
4	1	D4842-4	LOWER CUTTER BODY RH
5	6	MS21042L08	LOCKNUT
6	6	MS27039-0819	SCREW
7	12	NAS1149FN832P	WASHER
8	A/R	LOCTITE 598	RTV SEALANT



D4842-041 LOWER CUTTER ASSEMBLY

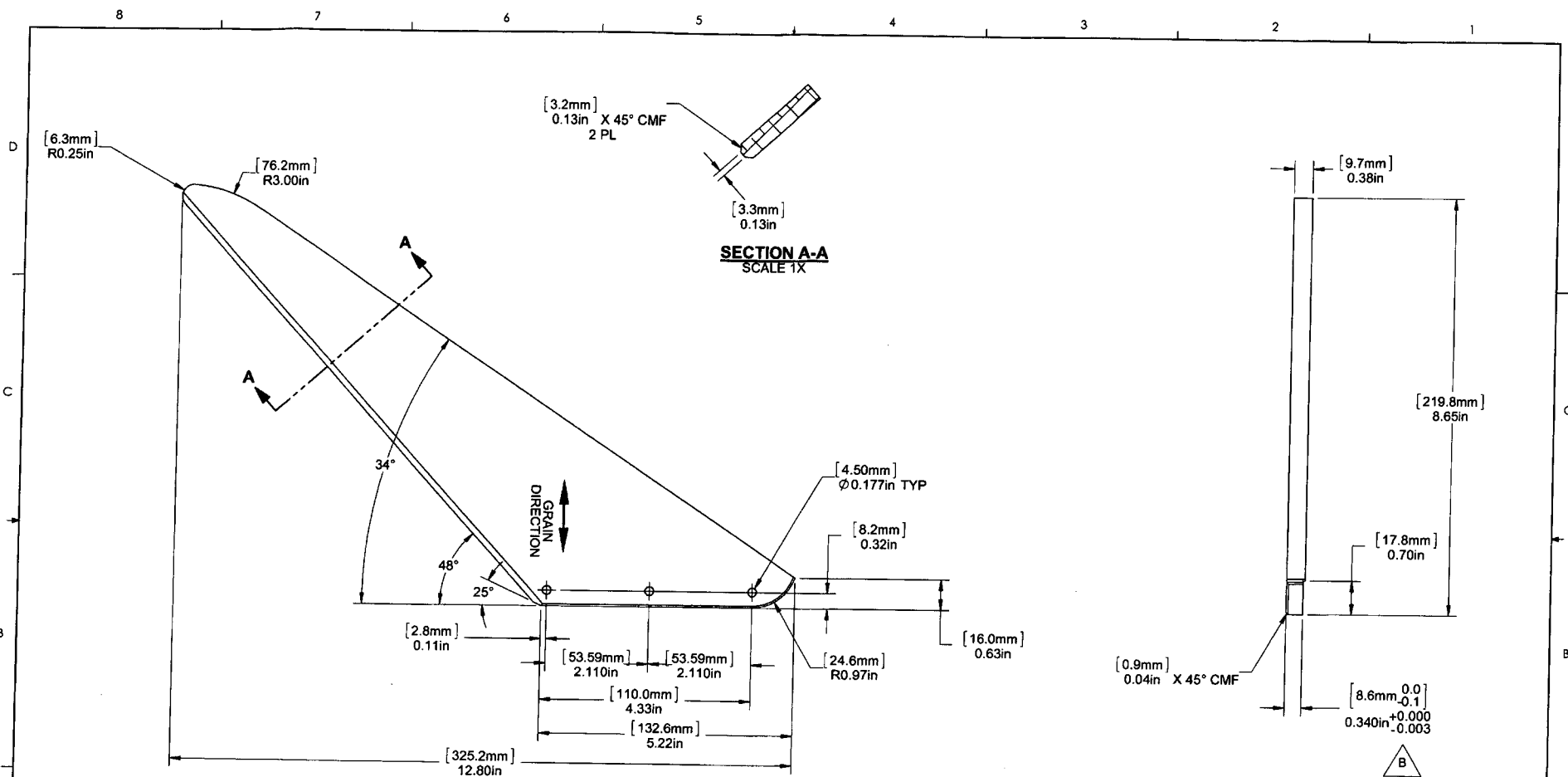
NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: N/A
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4842-041", AGUSTA WESTLAND KIT NUMBER "TBD", REVISION, BATCH NUMBER AND MANUFACTURE DATE, USING AN X-TENSION STAMP, AS PER QSI 044 METHOD 6.2
- 7) WEIGHT: 2.79 lbs (1.26 KGS)
- 8) APPLY RTV SEALANT TO ALL FAYING SURFACES UPON ASSEMBLY
- 9) CUTTING EDGE INTENDED TO BE SHARP. DO NOT BREAK SHARP EDGE.

RELEASED
R 2013-10-31

120151008 SH137835

B	CORRECT TOLERANCES (ZN B1-2) (ZN B1-3, D2-3) (ZN B7-5, D7-5)	DW	13.10.17
A	NEW RELEASE	DB	13.05.23
REV.	DESCRIPTION	BY	DATE
DESIGN	DB	DART AEROSPACE LTD	
DRAWN	DW	HAWKESBURY, ONTARIO, CANADA	
CHECKED	A.P.	DRAWING NO.	REV. B
MFG. APPR.	21	D4842	SHEET 1 OF 6
APPROVED	142	TITLE	SCALE
DE APPR.	142	LOWER CUTTER ASSY	NTS
DATE	13.10.17	COPYRIGHT © 2013 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	



D4842-1 LOWER CUTTER DEFLECTOR

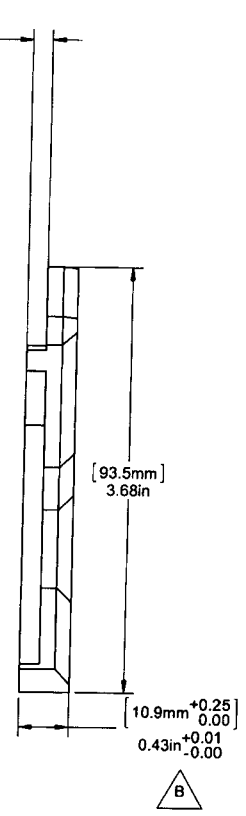
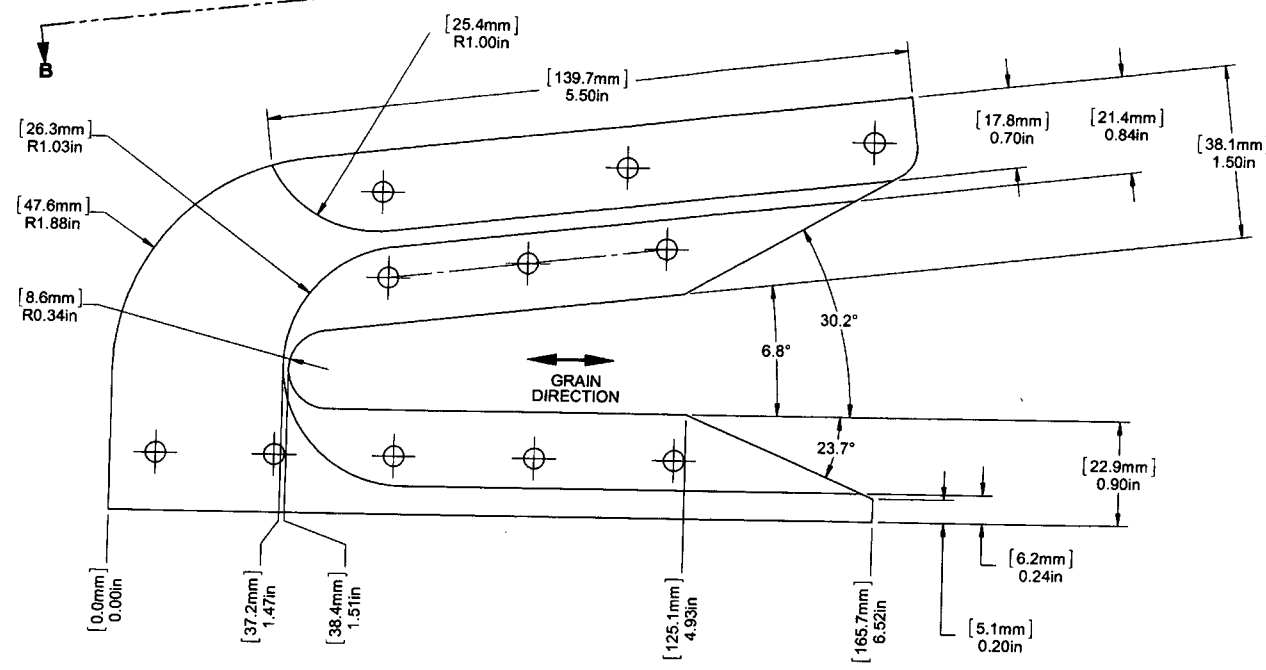
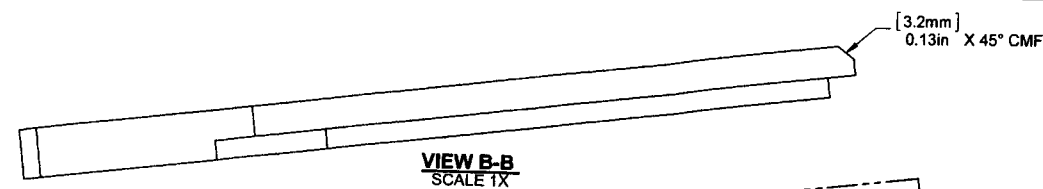
NOTES:

- 1) MATERIAL: 7075-T6 (OR T651/T6510/T6511/T62) ALUMINUM BAR
PER AMS-QQ-A-225/9 (OR AMS 4122/4123/4186/4187) OR
PER AMS-QQ-A-200/11 (DART SPEC M7075T6B)
- 2) FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III, CLASS 2, COLOR BLACK,
PRIME IAW MIL-P-23377J TYPE I CLASS N; 1-2 MIL MAX, AS PER QSI 005.
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED, ALL METRIC DIMENSIONS ARE REFERENCE DIMENSIONS.
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 1.18 lbs (0.59 kgs)
- 8) PART DIMENSIONS CONTROLLED BY CAD MODEL FILE: D4842-1-b.IGES

DESIGN	DB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	DW		
CHECKED	A.P.	DRAWING NO.	REV. B
MFG. APPR.	21	D4842	SHEET 2 OF 6
APPROVED	140	TITLE	SCALE
DE APPR.	140	LOWER CUTTER ASSY	NTS
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RELEASED
2013-10-31

8 7 6 5 4 3 2 1



D4842-3 LOWER CUTTER BODY LH

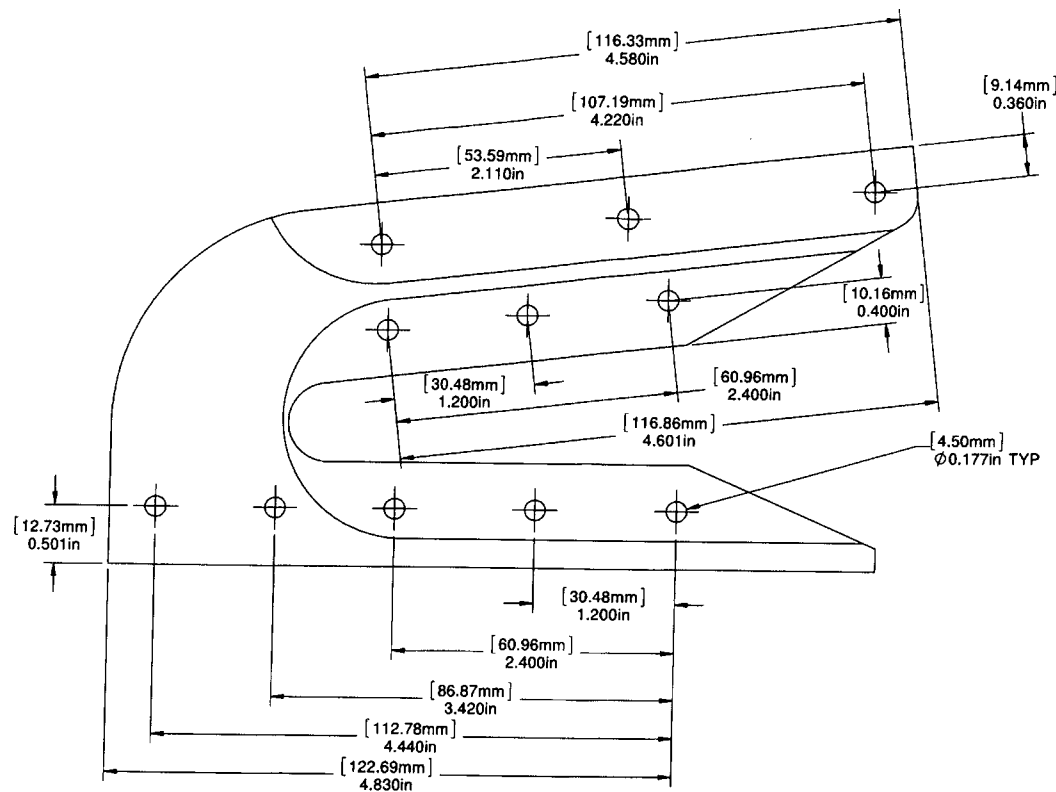
NOTES:

- 1) MATERIAL: 7075-T6 (OR T651/T6510/T6511/T62) ALUMINUM BAR
PER AMS-QQ-A-225/9 (OR AMS 4122/4123/4186/4187) OR
PER AMS-QQ-A-200/11 (REF DART SPEC M7075T6B)
- 2) FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III, CLASS 2, COLOR BLACK, AS PER QSI 017;
PRIME IAW MIL-P-23377J TYPE I CLASS N; 1-2 MIL MAX, AS PER QSI 005.
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED, ALL METRIC DIMENSIONS ARE REFERENCE DIMENSIONS.
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.49 lbs (0.22 kgs)
- 8) PART DIMENSIONS CONTROLLED BY CAD MODEL FILE: D4842-3-b.IGES

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2013-10-31

DESIGN	DB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	DW		
CHECKED	A.P.	DRAWING NO.	REV. B
MFG. APPR.	8/1	D4842	SHEET 3 OF 6
APPROVED	1/1	TITLE	SCALE
DE APPR.	1/1	LOWER CUTTER ASSY	NTS
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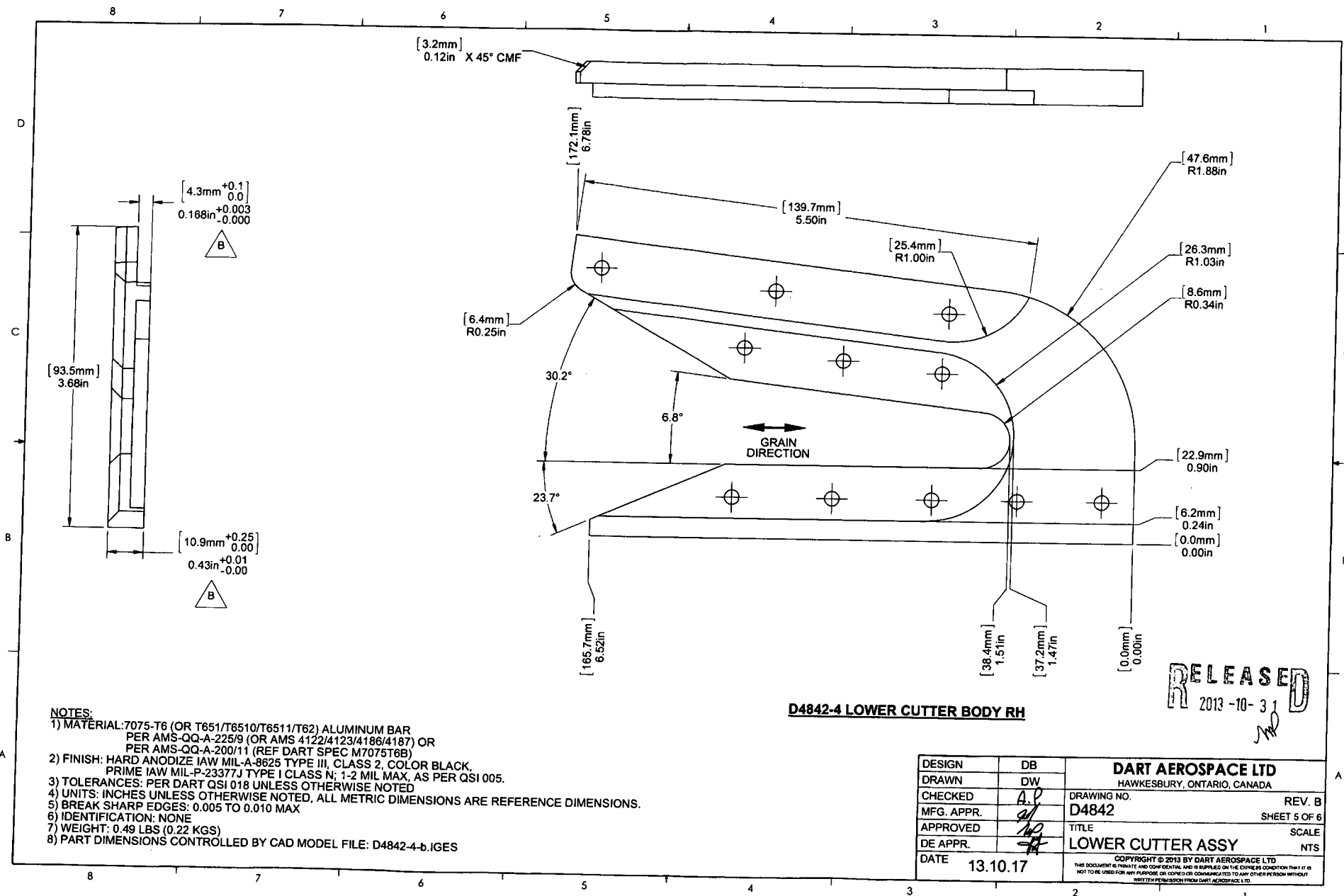
8 7 6 5 4 3 2 1



D4842-3 LOWER CUTTER BODY LH
(AUXILLIARY VIEW)

RELEASE
2013-10-31
mf

DESIGN	DB	DART AEROSPACE LTD	
DRAWN	DW	HAWKESBURY, ONTARIO, CANADA	
CHECKED	A.P.	DRAWING NO.	REV. B
MFG. APPR.	27	D4842	SHEET 4 OF 6
APPROVED	149	TITLE	SCALE
DE APPR.		LOWER CUTTER ASSY	NTS
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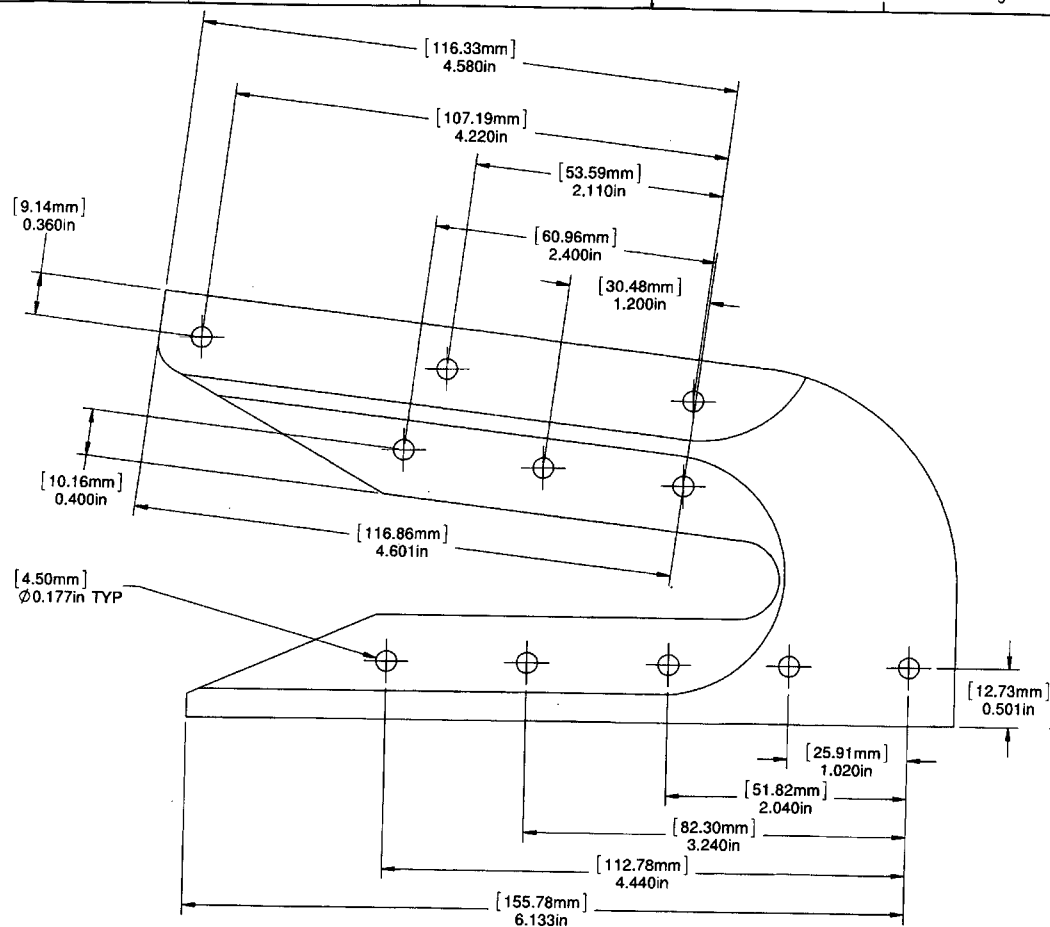
RELEASED
2013-10-31

D4842-4 LOWER CUTTER BODY RH

NOTES:

- 1) MATERIAL: 7075-T6 (OR T651/T6510/T6511/T62) ALUMINUM BAR
PER AMS-QQ-A-225/9 (OR AMS 4122/4123/4186/4187) OR
PER AMS-QQ-A-200/11 (REF DART SPEC M7075T6B)
- 2) FINISH: HARD ANODIZE IAW MIL-A-8625 TYPE III, CLASS 2, COLOR BLACK,
PRIME IAW MIL-P-23377J TYPE I CLASS N, 1-2 MIL MAX, AS PER QSI 005.
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED, ALL METRIC DIMENSIONS ARE REFERENCE DIMENSIONS.
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.49 LBS (0.22 KGS)
- 8) PART DIMENSIONS CONTROLLED BY CAD MODEL FILE: D4842-4-b.IGES

DESIGN	DB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	DW		
CHECKED	A.P.	DRAWING NO.	REV. B
MFG. APPR.	2/	D4842	SHEET 5 OF 6
APPROVED	2/	TITLE	SCALE
DE APPR.	2/	LOWER CUTTER ASSY	NTS
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D4842-4 LOWER CUTTER BODY RH
(AUXILLIARY VIEW)

DESIGN	DB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	DW		
CHECKED	A.P.	DRAWING NO.	REV. B
MFG. APPR.	[Signature]	D4842	SHEET 6 OF 6
APPROVED	[Signature]	TITLE	SCALE
DE APPR.	[Signature]	LOWER CUTTER ASSY	NTS
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RELEASED
2013-10-31